

AUTHOR INDEX

- Aiba, T.** See Iijima, N.
- Aoki, M.** See Endo, H.
- Aoki, T.,** and Fukuoka, F. Chemotherapeutic tests using pulmonary tumor formation by intravenous injections of cancer cells,47
- Aoki, T.** See Matuda, K.
- Aoyama, Y.** See Endo, H.
- Ashikawa, K.** Studies on the amine oxidase in the liver and other tissues of rats fed 4-dimethylaminoazobenzene,..... 367
- Awa, A.,** and **Kanō, K.** Cytological studies of tumors. XXX. General characteristics and cytological features of a transplantable mouse tumor (EM tumor) of spontaneous origin, 395
- Doi, G.** Some chemical changes in the liver of rats fed p-dimethylaminoazobenzene. II,...51
- Endo, H. Aoki, M.,** and **Aoyama, Y.** Formation of nuclear inclusion bodies in tissur culture cells by 4-nitroquinoline N-oxide, 209
- Fukuoka, F., Ono, T., Ohashi, M.,** and **Nishimura, S.** Effect of 4-nitroquinoline N-oxide on the metabolism of cancer cells in vitro,21
- , See Aoki, T.
- , See Nakahara, W.
- , See Ono, T.
- Fujita, K.** See Iijima, N.
- Hanaki, A.** See Terayama, H.
- Hara, Y.** Initial stages of glycolysis in testis and malignant tissues, 375
- Hayashi, Y.** Histological and histochemical study of the early lesions of mouse skin after a single application of 4-nitroquinoline N-oxide, 219
- Hishikawa, S.** Liver catalase activity in gastric cancer patients, in relation to the classified types of gastric carcinoma and pathological changes of liver, 309
- Hori, S. H.** See Matsumoto, T.
- Hukui, T.** See Kuru, M.
- , See Matuda, K.
- Ichiba, K.** See Sato, H.
- Iijima, N., Matsuura, K., Fujita, K., Aiba, T.,** and **Ukishima, H.** Copper metabolism in the liver in gastric cancer, ...77
- Ishihara, T.** Cytoligical studies of tumors. XXXI. A chromosome study in a human gastric carcinoma, 403
- Ito, E., Matuda, K. Kōsaki, G.,** and **Kuru, M.** Effect of oncotrephin, the mitosis-promoting substnce isolated from rat ascites hepatoma (AH 130) on proliferation of strain L cells,..... 437
- , See Kōzaki, G.
- Kanō, K.** See Awa, A.
- Kōzaki, G., Matuda, K., Ito, E.,** and **Kuru, M.** Furtner studies on mitosis promoting substance in human malignant tumors: its effect on strain L cells,..... 121
- , See Ito, E.
- , See Kuru, M.
- , See Matuda, K.
- Kuroda, Y.** See Mizunoya, T.,67
- Kuru, M., Kōzaki, G., Matuda, K.,** and **Hukui, T.** On a substance isolated from certain human malignant tumors promoting mitosis in vitro, 111
- , See Ito, E.
- , See Kōzaki, G.
- , See Matuda, K.
- Maruyama, Y.** Cytological studies of neoplasm. V. Morphogenesis of V-chromosome in Yoshida sarcoma cells with special

- reference to its structural aberration, 239
- Matsumoto, T., and Hori, S.H.** Some cytological studies on changes in mouse liver following the implantation of carcinoma 51, 141
- Matsuura, K.** See Iijima, N., 77
- Matuda, K., Hukui, T., Aoki, T., Kosaki, G., and Kuru, M.** Isolation of the mitosis promoting substance, oncotrephin, from rat ascites hepatoma (AH 130), 429
- , See Ito, E.
- , See Kōzaki, G.
- , See Kuru, M.
- Minowada, J.** Track autoradiographic study on the ^{14}C -2-glycine incorporation into the Ehrlich ascites carcinoma cells, 417
- Mizunoya, T., Kuroda, Y., and Yamamura, Y.** Uptake and conservation of radioactive zinc by Ehrlich carcinoma cells, ... 67
- Mori, K., and Yesuno, A.** Preliminary note on the induction of pulmonary tumors in mice by isonicotinic acid hydrazide feeding, 107
- Murata, Y.** Study of splenic enlargement in tumor-bearing mice, 89
- Nakahara, W., and Fukuoka, F.** Study of carcinogenic mechanism based on experiments with 4-nitroquinoline N-oxide, 1
- , and ———. On the mechanism of radiation carcinogenesis, 17
- Nishimura, S.** See Fukuoka, F.
- Oboshi, S.** Cross-resistance between mytomycin C and alkylating agents in experimental cancer chemotherapy, 147
- Odashima, S.** Development of liver cancer in the rat by 20-methylcholanthrene painting following initial 4-dimethylaminoazobenzene feeding, 321
- Ohashi, M., and Ono, T.** Purification of toxohormone by DEAE-cellulose column-chromatography, 347
- , See Fukuoka, F.
- , See Ono, T.
- Oide, H.** Effect of transplanted tumor on the pyridine nucleotide synthesis in the mouse liver, 177
- Okuda, K.** Effect of p-dimethylaminoazobenzene on the excretion of B-vitamins in the urine of rat, 155
- , Changes of some flavine enzymes in the liver of rat during DAB carcinogenesis, 163
- Ono, T., and Tomaru, T.** The toxic tumor factor depressing DPN synthesis in tumor-bearing animals, 37
- , **Sugimura, T., and Ohashi, M.** Effect of iron administration on the free protoporphyrin level in erythrocyte and liver of tumor-bearing rats, 185
- , **Tomaru, T., and Fukuoka, F.** Effect of 4-nitroquinoline N-oxide derivatives on the DPN dependent enzyme systems, 189
- , See Ohashi, M.
- Otsuka, M.** See Terayama, H., 57
- Sato, N., Ichiba, K., and Takeda, Y.** On the duodenal spread of gastric cancer, 409
- Sato, T.** Paper electrophoretic studies on enzymes in liver of rats fed 4-dimethylaminoazobenzene. IV. Desaminase of fatty acid amide, 359
- Sugimura, T.** See Ono, T., 185
- Sugiura, K.** Effects of compounds on the Friend mouse virus leukemia, 251
- Takamiya, K.** Studies on anti-tumor activities of oximes and metal chelate compounds. I. Examinations of oximes, 265
- , ———. II. Copper-dimethylglyoxime, 277
- , ———. III. Copper chelates, ... 291
- Takeda, Y.** See Sato, H.
- Tanaka, T.** Cytological studies of tumors, XXV. A transplantable rat ascites hepatoma produced by p-dimethylaminoazoben-

- zene,..... 127
- Tanaka, T.** Cytological studies of tumors. XXIX. Morphological and cytological changes in the ascites hepatoma II of Buffaro rat after transplantation into F₁ hybrids, Wistar-King A × Albany, 383
- Terayama, H., and Otsuka, M.** Studies on the mechanism of liver carcinogenesis by certain aminoazo dyes. II. The hepatic formaldehyde dehydrogenase and xanthin oxidase activities of rats and mice in relation to the DAB carcinogenesis,.....57
- , and **Hanaki, A.** Studies on the mechanism of liver carcinogenesis by certain aminoazo dyes. III. Effect of para-formaldehyde, dimethyl-p-phenylene diamine and disulfiram upon the carcinogenic potency as well as the protein binding of aminoazo dyes and the carcinogenicity of dimethylaminoazoxybenzene N-oxide, 169
- Tomaru, T.** See Ono, T.
- . See Ono, T.
- Ukishima, H.** See Iijima, N.
- Yamamura, Y.** See Mizunoya, T.
- Yamana, K.** Metabolic heterogeneity of ribo-nucleic acid in Ehrlich ascites tumor cell, 201
- Yesuno, A.** See Mori
- Yosida, T.H.** Chromosomal alteration and development of tumors. II Chromosome conditions and invasiveness of the Yoshida sarcoma cells, 233

SUBJECT INDEX

- Alkylating agents**, cross-resistance with
 mytomycin C, 147
- Amine oxidase**, in DAB fed rat liver,..... 367
- Amnion tissue culture cell**, tumor formation by, 227
- B-vitamins**, effect of DAB on excretion of,... 155
- Carcinogenic mechanisms**, with 4-nitroquinoline N-oxide, 1
 —, of radiation,17
- Catalase activity**, in liver of gastric cancer patients, 309
- Chemotherapeutic test**, using pulmonary tumor formation,47
 —, with copper chelates, 291
 —, with mytomycin C, 147
 —, with alkylating agents, 147
 —, with various compounds, 251
- Chromosome**, in hepatoma II, 383
 —, in transplantable mouse tumor, 395
 —, in human gastric carcinoma,..... 403
 —, alteration of, in Yoshida sarcoma cell, 233
 —, V-chromosome in Yoshida sarcoma cell, 239
- Copper-chelates**, anti-tumor activities of,... 291
- Copper metabolism**, in liver in gastric cancer,.....77
- Cross-resistance**, between mytomycin C and alkylating agents,..... 147
- ¹⁴C-2-glycine**, incorporation of, into the Ehrlich carcinoma cells, 417
- DAB**, See p-dimethylaminoazobenzene.
- DEAE-cellulose column chromatography**, purifications of toxohormone by, 347
- Desaminase**, in liver of 4-dimethylaminoazobenzene fed rats, 359
- p-Dimethylaminoazobenzene**, chemical changes in liver fed with,51
 —, liver carcinogenesis by,.....57
 —, ascites hepatoma produced by,..... 127
 —, effect on excretion of B-vitamins, ... 155
 —, changes in flavin enzymes during feeding of, 163
 —, liver cancer development by combined action with 20-methylcholanthrene,..... 321
 —, on liver desaminase, 359
 —, on amine oxidase,..... 367
- Dimethylaminoazoxybenzene N-oxide**, carcinogenicity of, 169
- Dimethyl-p-phenylane diamine**, effect on carcinogenic potency of aminoazo dyes, 169
- Disulfiram**, effect on carcinogenic potency of aminoazo dyes, 169
- DPN dependent enzymes**, effect of 4-nitroquinoline N-oxide on,..... 189
- DPN synthesis**, depression by tumor factor,...37
- Duodenal spread**, of gastric cancer,..... 409
- Flavin enzymes**, changes during DBA carcinogenesis, 163
- Formaldehyde dehydrogenase**, in DAB carcinogenesis,57
- Friend virus leukemia**, effect of compounds on, 251
- Gastric cancer**, duodenal spread of,..... 409
 —, catalase activity in liver of,..... 309
- Hepatoma**, ascites form, produced by DAB, 127
 —, chromosomes in, 383
 —, formation by methylcholanthrene painting following DAB feeding,..... 321
- Iron**, effect on protoporphyrin in tumor-bearing animals, 185
- Isonicotinic acid hydrazide**, pulmonary tumor induction by, 107
- Liver**, cytological changes after tumor im-

plantation,	141	and effect of iron on,.....	185
——, catalase in gastric cancer patients of,...	309	Pulmonary tumor , formation by intravenous injection of cancer cells,	47
Liver cancer . See hepatoma.		——, induction by isonicotinic acid hydrazide feeding,	107
Metabolism of cancer cells , effect of 4-nitroquinoline N-oxide on,	21	Pyridine nucleotide , effect of tumor on the synthesis of,	177
Metal chelates , anti-tumor activities of,...	277	Radiation , carcinogenic mechanism of,.....	17
20-Methylcholanthrene , liver cancer development by painting, following DAB feeding,	321	Ribonucleic acid , metabolic heterogeneity of,	201
Mitosis-promoting substance . See Oncotrephin.		Splenic enlargement , in tumor bearing animals,	89
Mytomycin C , cross-resistance with alkylating agents,	147	Toxohormone , depression of DPN synthesis,	37
4-Nitroquinoline N-oxide , carcinogenic mechanism of,	1	——, purification by DEAE-column chromatography,	347
——, effect on metabolism of cancer cells,...	21	Track autoradiography , of ¹⁴ C-2-glycine incorporation into Ehrlich carcinoma cells,	417
——, effect on DPN depending enzyme systems,	189	Tumor bearing animals , depression of DPN synthesis in,	37
——, formation of nuclear inclusion bodies by,	209	——, splenic enlargement in,	89
——, early lesions after a single application,	219	——, protoporphyrin in, and effect of iron on,	185
Nuclear inclusion bodies , formation by 4-nitroquinoline N-oxide,	209	Tumor formation , by implantation of amnion tissue culture cell,.....	227
Oncotrephin , isolation from human tumors,	111	——, see also pulmonary tumor.	
——, effect on strain L cells,	121	Xanthin oxidase , in DAB carcinogenesis, ...	57
——, isolation from rat ascites hepatoma,...	429	Yoshida sarcoma , chromosome alteration in,	233
Oximes , anti-tumor activities,	277	——, V-chromosome in,.....	239
Paraformaldehyde , effect on carcinogenic potency of aminoazo dyes,.....	169	Zinc , radioactive, uptake and conservation by cancer cells,.....	67
Protein binding , of aminoazo dye,	169		
Protoporphyrin , in tumor-bearing animals,			